IN THE CLAIMS:

Please cancel Claims 3 and 35, without prejudice to or disclaimer of the subject matter presented therein.

Please amend Claims 1, 2, 4, 5, 11, 28-30, 31, 32, 33, and 36 as follows.

Please and add new Claim 37 as follows.

1. (Currently Amended) An image observation apparatus for observing image information, comprising:

image display means for displaying image information;

a display optical system for projecting the image information displayed on the image display means, onto a retina of an observing eye;

pupil position detecting means for detecting a position of an entrance pupil of the observing eye; and

incident beam control means for changing a position of an incident beam on ~~an~~ a plane of the entrance pupil of the observing eye based on information obtained by the pupil position detecting means,

wherein a size of the incident beam on the entrance pupil is ~~equal to or~~ smaller than a size of the entrance pupil of the observing eye.

2. (Currently Amended) ~~The image observation apparatus according to Claim 1, wherein the position of the incident beam on the entrance pupil of the observing eye is changed~~

~~by said incident beam control means in accordance with the image information displayed on said image display means~~ An image observation apparatus for observing image information, comprising:

image display means for displaying image information;

a display optical system for projecting the image information displayed on the image display means, onto a retina of an observing eye; and

incident beam control means for changing a position of an incident beam on a plane of the entrance pupil of the observing eye being based on estimation of position of the entrance pupil of the observing eye estimated from the image information being displayed on the image display means,

wherein a size of the incident beam on the entrance pupil is smaller than a size of the entrance pupil of the observing eye.

3. (Canceled)

4. (Currently Amended) The image observation apparatus according to Claim ~~3~~ 1, wherein said pupil position detecting means comprises eyeball illuminating means and light receiving means for receiving light emitted from the eyeball illuminating means and reflected by ~~the~~ an eyeball ~~from illumination light emitted from the eyeball elimination light emitted from the eyeball illuminating means~~, and wherein ~~the~~ an eyeball illumination light is infrared light.

5. (Currently Amended) The image observation apparatus according to either one of Claims 1, 2 and to 4, comprising illumination means for illuminating said image display means, wherein an illumination light source of said illumination means is imaged at or near the position of the entrance pupil of the observing eye by said display optical system and wherein the position of the incident beam on the plane of the entrance pupil of the observing eye is changed by controlling an emission state of the illumination means.

6. (Original) The image observation apparatus according to Claim 5, wherein said image display means comprises a transmission type spatial modulation element.

7. (Original) The image observation apparatus according to Claim 5, wherein said image display means comprises a reflection type spatial modulation element.

8. (Original) The image observation apparatus according to Claim 5, wherein said illumination means comprises a light emitting element array.

9. (Original) The image observation apparatus according to Claim 5, wherein said illumination means comprises a surface illuminant and a spatial modulation element.

10. (Original) The image observation apparatus according to Claim 5, wherein said illumination means comprises a substantially point light source and an optical system having a positive power.

11. (Currently Amended) The image observation apparatus according to either one of Claims 1, 2 and ~~to~~ 4, wherein said image display means is a self-emission type or light-source-integrated type display element, said image observation apparatus comprising a spatial modulation element for limiting light from the image display means, wherein the spatial modulation element is imaged at or near the position of the entrance pupil of the observing eye by said display optical system, and wherein the position of the incident beam on the plane of the entrance pupil of the observing eye is changed by controlling the spatial modulation element.

12. (Original) The image observation apparatus according to Claim 11, wherein said spatial modulation element is a transmission type spatial modulation element having a two-dimensional pixel structure.

13. (Original) The image observation apparatus according to Claim 11, wherein said spatial modulation element is a reflection type spatial modulation element having a two-dimensional pixel structure.

14. (Original) An image observation apparatus comprising image display means for displaying a plurality of parallax images, and a display optical system for guiding light from the image display means to an observing eye of an observer, said image observation apparatus being constructed to spatially divide an ~~exist~~ exit pupil of the display optical system into a plurality of regions, substantially align a position of the exit pupil of the display optical system with a position of an entrance pupil of the observing eye, cause parallax images corresponding to the

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respective regions to be incident on the observing eye, and thereby cause a plurality of parallax images to be incident on the single eye of the observer,

wherein an area of a region in the outermost periphery out of the plurality of regions in the divided exit pupil is greater than those of the regions except for that in the outermost periphery.

15. (Original) An image observation apparatus comprising image display means for displaying a plurality of parallax images, and a display optical system for guiding light from the image display means to an observing eye of an observer, said image observation apparatus being constructed to spatially divide an exit pupil of the display optical system into a plurality of regions, substantially align a position of the exit pupil of the display optical system with a position of an entrance pupil of the observing eye, cause parallax images corresponding to the respective regions to be incident on the observing eye, and thereby cause a plurality of parallax images to be incident on the single eye of the observer.

wherein a size of the exit pupil of the display optical system is larger than size of the entrance pupil of the observing eye and a size of a beam from the image display means at the position of the entrance pupil of the observing eye is substantially equal to or smaller than the size of te entrance pupil of the observing eye, said image observation apparatus comprising control means to change a position of the beam from the image display means at the position of the entrance pupil of the observing eye.

16. (Original) The image observation apparatus according to Claim 15, further comprising pupil position detecting means for detecting the position of the pupil of the observer, wherein the position of the beam from the image display means at the position of the entrance pupil of the observing eye is changed by said control means, based on information obtained by the pupil position detecting means.

17. (Original) The image observation apparatus according to Claim 16, wherein said pupil position detecting means comprises eyeball illuminating means and light receiving means for receiving light reflected by the eyeball from illumination light emitted from the eyeball illuminating means, wherein the eyeball illumination light is infrared light.

18. (Previously Presented) The image observation apparatus according to either one of Claims 14 to 17 or 30 to 36, comprising illumination means having an illumination light source for illuminating said image display means, wherein said illumination means is located at or near a position optically equivalent to the entrance pupil of said display optical system, the illumination means comprises a plurality of unit light sources, images of the plurality of unit light sources are formed on a plurality of regions in the exit pupil of the display optical system, the exit pupil of the display optical system is spatially divided into a plurality of irradiation regions, and a display image on said image display means is controlled to switch to one corresponding to each irradiation region.

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19. (Original) The image observation apparatus according to Claim 18, wherein the plurality of unit light sources of said illumination light source are comprised of a light-emitting element array.

20. (Original) The image observation apparatus according to claim 18, wherein the plurality of unit light sources of said illumination light source are comprised of a surface illuminant and a spatial modulation element.

21. (Previously Presented) The image observation apparatus according to either one of Claims 14 to 17 or 30 to 36, wherein said image display means comprises a plurality of display elements, said image observation apparatus comprising at least one illumination means having an illumination light source for illuminating the plurality of display elements, wherein the illumination means is located at or near a position optically equivalent to the entrance pupil of said display optical system, the illumination means comprises a plurality of unit light sources, images of the plurality of unit light sources are formed on a plurality of regions in the exit pupil of the display optical system, the exit pupil of the display optical system is spatially divided into a plurality of irradiation regions, and parallax images displayed on said plurality of display elements are controlled corresponding to each irradiation region.

22. (Original) The image observation apparatus according to Claim 21, wherein said illumination means is a plurality of illumination means, incidence of beams into a plurality of regions in the exit pupil of said display optical system is controlled in time division by

controlling in time division irradiation of beams from a plurality of unit light sources which an illumination light source of each illumination means has, and parallax images displayed on said plurality of display elements are controlled to switch to those corresponding to each region.

23. (Original) The image observation apparatus according to Claim 21, wherein the plurality of unit light sources of said illumination light source are comprised of a light-emitting element array.

24. (Original) The image observation apparatus according to Claim 21, wherein the plurality of unit light sources of said illumination light source are comprised of a surface illuminant and a spatial modulation element.

25. (Previously Presented) The image observation apparatus according to either one of Claim 14 to 17 or 30 to 36, wherein said image display means comprises a self-emission type image display element or a light-source-integrated type image display element, said display optical system comprises a relay optical system for forming an aerial image of a surface of the image display element and an eyepiece optical system for presenting an enlarged virtual image of the aerial image to the observing eye, a spatial modulation element having a two-dimensional pixel structure is located at or near a position of an entrance pupil of the eyepiece optical system, images of the spatial modulation element divide the exist pupil of said display optical system into a plurality of regions, beams incident to the plurality of regions in the exist pupil of said display optical system are controlled by controlling irradiation of beams from respective pixels of the

spatial modulation element, and parallax images displayed on said image display means are controlled to switch to those corresponding to circumstances of incidence of a beam into each region.

26. (Original) The image observation apparatus according to Claim 25, wherein said spatial modulation element is a transmission type spatial modulation element.

27. (Original) The image observation apparatus according to Claim 25, wherein said spatial modulation element is a reflection type spatial modulation element.

28. (Currently Amended) The image observation apparatus according to either one of Claims ~~1 to~~ 1, 2, or 4, 14 to 17 or 30 to 36, wherein said display optical system comprises a prism body having a decentered, rotationally asymmetric, reflective surface with optical powers differing depending upon azimuth angles.

29. (Currently Amended) An image observation system comprising a pair of image observation apparatus as set forth in either one of Claims ~~1 to~~ 1, 2, or 4, 14 to 17, or 30 to 36, for the left and right eyes of the observer.

30. (Currently Amended) An image observation apparatus comprising:

image display means for displaying a plurality of parallax images;

a display optical system including an exit pupil divided into a plurality of regions, for guiding the parallax images displayed on said image display means to each of the plurality of regions; and

control means for guiding light of the plurality of parallax images into the plurality of regions,

wherein an area of a region in the outermost periphery out of the plurality of regions in the divided exit pupil is greater than an area of regions except for a region in the outermost periphery ~~in the outermost periphery~~.

31. (Currently Amended) An image observation apparatus according to Claim 30, wherein the exit pupil of said display optical system ~~and the entrance pupil of said display optical system~~ and the entrance pupil of the observing eye are positioned to be coplanar.

32. (Currently Amended) An image observation apparatus according to Claim 30, wherein an area of the regions except for ~~a~~ regions in the outermost periphery out of the plurality of regions in the divided exit pupil is ~~substantially equal to or~~ less than an area of the entrance pupil of the observing eye.

33. (Currently Amended) An image observation apparatus comprising:

image display means for displaying a plurality of parallax images;

a display optical system including an exit pupil divided into a plurality of divided regions having an area ~~substantially equal to or~~ less than an area of an entrance pupil of an

observing eye, for guiding the parallax images displayed on said image display means to each of the plurality of regions; and

control means for guiding light of the plurality of parallax images into each corresponding area in the plurality of the divided regions,

wherein an size of the exit pupil of said display optical system is greater than an size of the entrance pupil of the observing eye,

and wherein said control means guides light of the parallax images into the plurality of regions selected from the plurality of the divided regions according to a position of the entrance pupil of the observing eye.

34. (Previously Presented) An image observation apparatus according to Claim 33, wherein the exit pupil of said display optical system and the entrance pupil of the observing eye are positioned to be coplanar.

35. (Cancelled)

36. (Currently Amended) The image observation apparatus according to Claim ~~15~~ 33, further comprising pupil position detecting means for detecting the position of the pupil of the ~~observer~~ observing eye, wherein said control means selects regions where a light of parallax images is guided ~~the position of the beam from the image display means at the position of the entrance pupil of the observing eye is changed by said control means,~~ based on information obtained by said pupil position detecting means.

37. (New) The image observation apparatus according to Claim 36, wherein said pupil position detecting means comprises eyeball illuminating means and light receiving means for receiving light emitted from the eyeball illuminating means and reflected by an eyeball, and wherein an eyeball illumination light is infrared light.